



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 5 :

A45C 3/00, 13/00

A1

(11) International Publication Number:

WO 93/21793

(43) International Publication Date: 11 November 1993 (11.11.93)

(21) International Application Number: PCT/AU93/00184

(22) International Filing Date: 28 April 1993 (28.04.93)

(30) Priority data:

PL 2133

28 April 1992 (28.04.92)

AU

PL 6448

18 December 1992 (18.12.92)

AU

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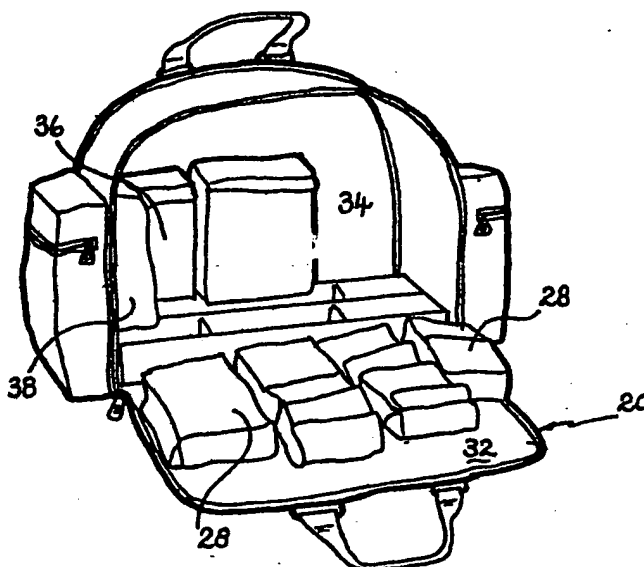
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(81) Designated States: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: BAG.



(57) Abstract

A bag (10) suitable for use in containing and carrying medical supplies, the bag having a handle means (12) and being defined by end walls, top and bottom walls and two side walls (20), at least one of the side walls (20) being semi-detachable to provide access to the interior of the bag, wherein at least one of the inner surfaces (32, 34) of the walls of the bag (10) includes an area consisting of one component of a velvet-type fastener, the bag thus being adapted for use with a set of removable containers (28, 36, 38) at least some of which include an area consisting of the other component of a velvet-type fastener so as to be securable to the area of the inner surfaces (32, 34) consisting of the one component.

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BAG

This invention relates to a bag that is particularly useful as a medical bag for use by persons who need to carry or transport various medical supplies. Such persons may either be medical doctors or other medical staff, and the medical supplies carried are most preferably those types of supplies that are required for first aid kits or for general medical supplies that are most likely required during emergencies.

Various medical organisations have in the past required their staff, such as their nursing staff, to carry various amounts of medical supplies and equipment to relatively remote places such that medical attention may be given. Traditionally, these medical supplies have been carried in rigid and heavy medical boxes and/or holdall bags which have not been designed for the specific purpose of carrying emergency equipment, and have proven to be cumbersome, difficult to carry and sometimes dangerous for persons carrying them. In particular, doctors and nursing staff involved in primary health care or emergency first-aid must be able to carry with them any medical supplies that may be needed during emergencies that they attend. Due to the very nature of these type of emergencies, the staff must be able to move unhindered with great speed and must have ready and fast access to the supplies being carried.

Other medical personnel also have a need to be able to transport such medical supplies, such as nursing staff who attend the homes of the elderly and infirm, together with any person who is responsible for the provision of first aid at a sporting club for injuries that occur on sporting fields. Again, the need to carry large, heavy and cumbersome first-aid boxes, which often only allow difficult and slow access to their contents, provide significant difficulties.

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It is an aim of the present invention to provide a bag that overcomes, or at least partly alleviates, the difficulties with the traditional medical boxes referred to above.

The present invention provides a bag suitable for use in containing and carrying medical supplies, the bag having a handle means and being defined by end walls, top and bottom walls and two side walls, at least one of the side walls being semi-detachable to provide access to the interior of the bag, wherein at least one of the inner surfaces of the walls of the bag includes an area consisting of one component of a velvet-type fastener, the bag thus being adapted to use with a set of removable containers at least some of which include an area consisting of the other component of a velvet-type fastener so as to be securable to the area of the inner surface consisting of the one component.

The velvet-type fastener is preferably the material marketed under the trade name VELCRO, where the one component is the hook portion of the velcro fastener and the other component is the loop portion of the velcro fastener, or vice versa.

In a preferred form of the invention, the entire inner surface of each of the walls of the bag consists of one component of the velcro fastener. In this way, each of the removable containers may include thereon a piece of the other component of the velcro fastener such that those removable containers may be secured against the inner surfaces of those walls. This allows the removable containers to be specifically placed and well organised within the bag rather than simply having those containers placed haphazardly within the bag.

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Preferably the two side walls of the bag are both semi-detachable, being hingedly joined at their respective junctions with the bottom wall, and including joining means for joining the remaining peripheral edges of the side walls to the bag. These joining means are preferably in the form of zips.

In order that the zips of the side walls are easily and rapidly openable, it is preferred that the end walls and top wall of the bag are defined by a single curved continuous wall that forms a join with the side walls that is a substantially continuous curve. In this form, the side walls are hingedly joined along a straight edge with the bottom wall, and have opposing side edges having initial portions perpendicular to the bottom edge but that continue to form a single continuously curved portion therebetween.

The material of construction of the bag is preferably water resistant and pliable, but is reasonably rigid such that the bag will not collapse when both of the side walls have been opened. Any suitable material will suffice, provided that the material will not absorb liquids and will provide the stiffness required. In this respect, the preferred construction of the bag having a single continuously curved top wall also assists in the bag not collapsing when both of the side walls have been opened.

It is also preferred that the bag is constructed with double stitching where appropriate, does not include any metal parts to avoid rusting and corrosion and the like, has no sharp protrusions to prevent injury therefrom, includes some form of hooking means to allow the bag to be suspended from any suitable object at a height above the ground where necessary, and includes double handles as the handle means to allow the bag to be easily carried.

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Furthermore, the removable containers may be any suitable type of container that is necessary to hold medical supplies. For instance, the removable containers may be transparent holding bags constructed of a size suitable to take various types of medical supplies therein, such as bandages, swabs, small instruments, medical fluids and the like, or may be fluid bags or medical containers themselves.

A rigid box may also be provided that will sit in the bottom of the bag that may be used to contain drugs, needles, thermometers and the like that need to be stored in a rigid container and that may need to be removed and placed in a secure place or a refrigerator or the like. Alternatively, the rigid box may be provided in a sleeve mounted to the bag below the bottom wall, the sleeve being closable at either end thereof for safe transport. This allows for the usable space in the interior of the bag to be maximised, and also provides easy access to the contents of the rigid box without having to firstly remove any of the contents of the bag itself. Further, by making the sleeve a relatively rigid piece, the bag will continue to stand erect after the box has been removed.

External pockets may also be provided on the bag, for instance located externally of the end walls for use as closable pouches for containing bulky items such as needle collection containers, or wide flat pockets may be provided on the external surface of the side walls for containing documentation or the like.

It can be seen from the above description of the invention that a bag may be provided that is lightweight, easily carried, and is unlikely to injure the person carrying the bag due to it being rigid and heavy, and that provides rapid and easy access to the contents thereof. In this respect, the bag may be placed on the ground and both side

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walls may be opened and laid flat such that the entire contents of the bag, which will be secured to the various inner surfaces of the walls of the bag, are viewable and are easily accessible. The velcro fasteners allow the various containers within the bag to be easily removed for access to their contents, and then subsequently replaced to be fixed in their desired position. The contents of the bag thus remain organised and are not likely to be lost within the bag or be difficult to again locate.

Such a bag allows for different organisations to include therewithin their own requirements for medical supplies depending upon the use of the bag. Any number of removable containers may be provided for use by these organisations as they deem necessary, or alternatively the organisation may provide their own containers for use with the bag. Existing medical containers may also be used either to sit loose within the bag or within pockets of the bag, or by adapting those containers to include one component of the velcro fastener such that the container is securable to an inner surface of the bag.

Two preferred embodiments of the invention will now be described in relation to the accompanying drawings. However, it is to be understood that the following description is not to limit the generality of the above description. In the drawings:-

Figure 1 is a perspective view of a bag according to a first preferred embodiment of the invention;

Figure 2 is a perspective view of a bag according to Figure 1 having both side walls open;

Figure 3 is a perspective view of a bag according to Figure 1 having one side wall open; and

Figure 4 is a perspective view of a bag according to a second preferred embodiment of the invention.

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illustrated in Figure 1 is a bag 10 having handles 12, external end pockets 14 and 16 and an external side pocket 18. One of the two semi-detachable side walls 20 is illustrated in Figure 1, as is the continuously curved wall 22 that includes the end and top wall portions. The side wall 20 is hingedly joined along its bottom edge 24 to the bottom wall (not shown) of the bag 10.

A zip fastener 26 is provided to join the remaining peripheral edges of the side wall 20 to the continuously curved wall 22. In this respect, it can be seen that the path of the zip does not include any sharp corners that may be difficult or slow for a user to negotiate.

Figure 3 illustrates the bag with one side wall opened to expose the contents of the bag. The contents in the bag include a set of removable containers in the form of transparent holding bags 28 and a rigid box 30. The holding bags 28 are sized to enclose particular types of medical supplies as necessary for the use of the bag. These holding bags have a component of a velcro fastener secured to the rear thereof and the inner surface 32 of the side wall is constructed of the other component of the velcro fastener. Thus, in this embodiment, the hook material of the velcro fastener is secured in a single strip to the rear of each of the holding bags 28 while the internal surface 32 of the side wall comprises the loop component of the velcro fastener completely thereover.

The internal surface 34 of the other side wall of the bag 10 is also visible in Figure 3. The holding bags 36 that are upstanding against the inner surface 34 are secured to the inner surface 34 by way of the velcro fastener system as described above. Furthermore, the holding bag 38 illustrated in Figure 3 is secured to the inner surface of the wall 22 (as is also illustrated in Figure 2).

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Figure 2 illustrates how both side walls of the bag may be opened to lie flat thus exposing in a well organised manner all of the contents of the bag. These contents are not loose and will thus not move about unless actually removed from the bag by the user. A respective holding bag may be readily replaced in its own position after use.

Furthermore, the rigid box 30 as illustrated in Figures 2 and 3 is able to be removed from the bag if necessary, such as for storage in a secure place or for storage in a refrigerator or the like if drugs contained therein require refrigeration.

The curvature of the wall 22 is well illustrated in Figure 2, and in part is responsible for the bag not collapsing when being used in the position illustrated in Figure 2. The material of this wall 22 is preferably a reasonably rigid material to assist in maintaining the shape of the bag.

Illustrated in Figure 4 is a second embodiment of the bag of the present invention that includes the same basic features of the embodiment of Figures 1 to 3, but which also includes a sleeve 50 for receiving a rigid box 52.

The sleeve 50 is shown as an extension to the bottom of the bag, and lies below the bottom wall thereof. In this embodiment, only one end 54 of the sleeve 50 is openable, the other end 56 being covered by the bottom portion of the external pouch 58.

The rigid box 52 is shown in the form of a slidable tray having movable and adjustable internal partitions 60 that allow the construction of different size compartments as required. The box may be held in place within the sleeve by an end-piece having engaging tabs projecting from either end thereof for engagement with the side-walls of the bag.

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Thus, it can be seen from Figure 4 that one of the engaging tabs 62 may include a piece of Velcro thereon for attachment to a corresponding piece of Velcro 64 on the side-wall. The end-piece and the other engaging tab are not shown.

It will be understood that other improvements and modifications to the configuration of the bag described herein may be possible, that will still be within the scope of the present invention.

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CLAIMS:

1. A bag suitable for use in containing and carrying medical supplies, the bag having a handle means and being defined by end walls, top and bottom walls and two side walls, at least one of the side walls being semi-detachable to provide access to the interior of the bag, wherein at least one of the inner surfaces of the walls of the bag includes an area consisting of one component of a velvet-type fastener, the bag thus being adapted to use with a set of removable containers at least some of which include an area consisting of the other component of a velvet-type fastener so as to be securable to the area of the inner surface consisting of the one component.
2. A bag according to claim 1 wherein the end walls and top wall of the bag are defined by a single curved continuous wall.
3. A bag according to claim 2 wherein the side walls are hingedly joined along a straight edge with the bottom wall and have opposing side edges having initial portions perpendicular to the bottom edge but that continues to form a single continuously curved portion therebetween.
4. A bag according to any one of claims 1 to 3 wherein the velvet-type fastener is VELCRO, where the one component is the hook portion of the velcro and the other component is the loop portion of the velcro, or vice versa.
5. A bag according to claim 4, wherein the entire inner surface of each of the walls of the bag consists of one component of the velcro and each of the removable containers includes thereon a piece of the other component of the velcro such that those removable containers may be secured against the inner surfaces of those walls.

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6. A bag according to any one of claims 1 to 5 wherein the two side walls of the bag are both semi-detachable, being hingedly joined at their respective junctions with the bottom wall, and including joining means for joining the remaining peripheral edges of the side walls to the bag.

7. A bag according to claim 2 wherein the side walls are hingedly joined along a straight edge with the bottom wall and have opposing side edges having initial portions perpendicular to the bottom edge but that continue to form a single continuously curved portion therebetween.

8. A bag according to any one of claims 1 to 7 wherein a rigid box is provided that will sit in the bottom of the bag so as to be removable therefrom.

9. A bag according to claim 8 wherein the rigid box is provided in a sleeve mounted to the bag below the bottom wall, the sleeve being closable at either end thereof.

10. A bag according to claim 1 substantially as herein described in relation to the accompanying drawings.

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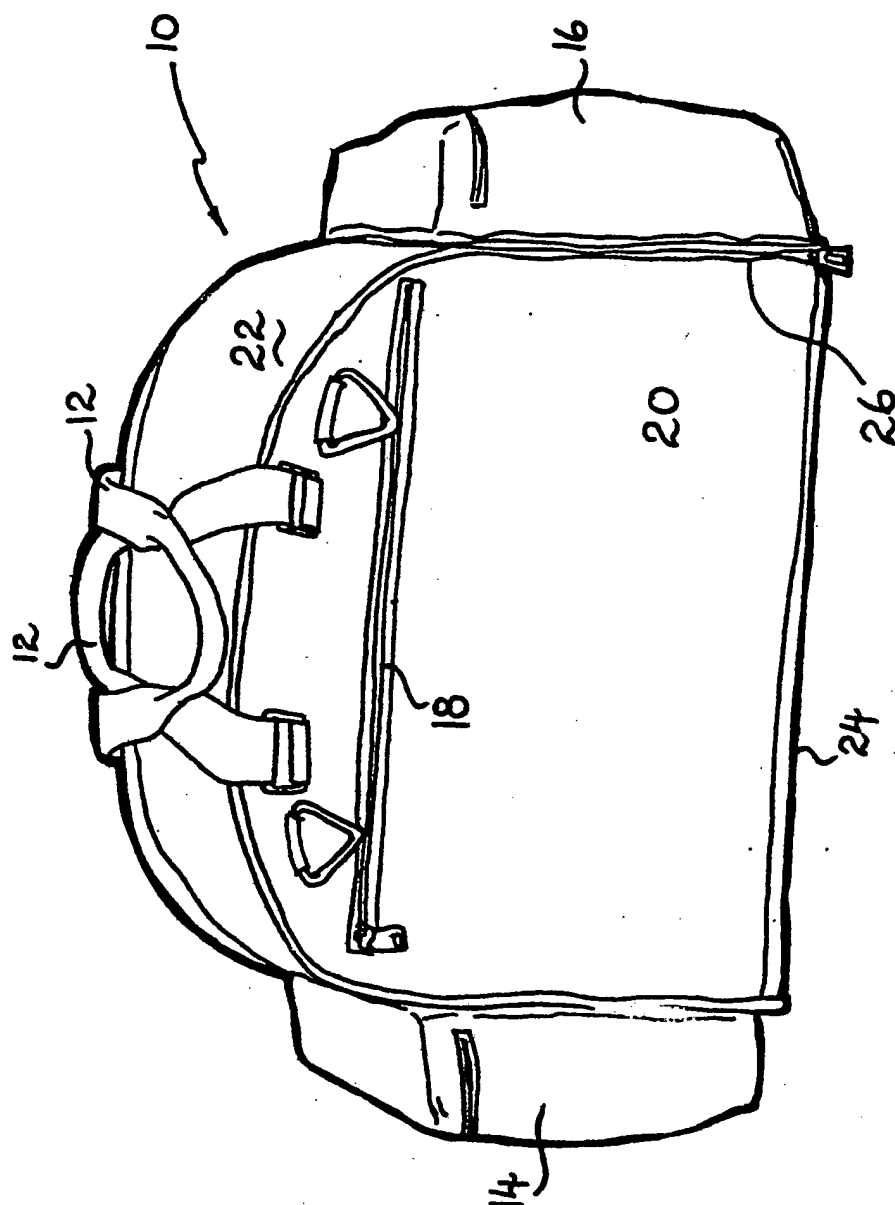
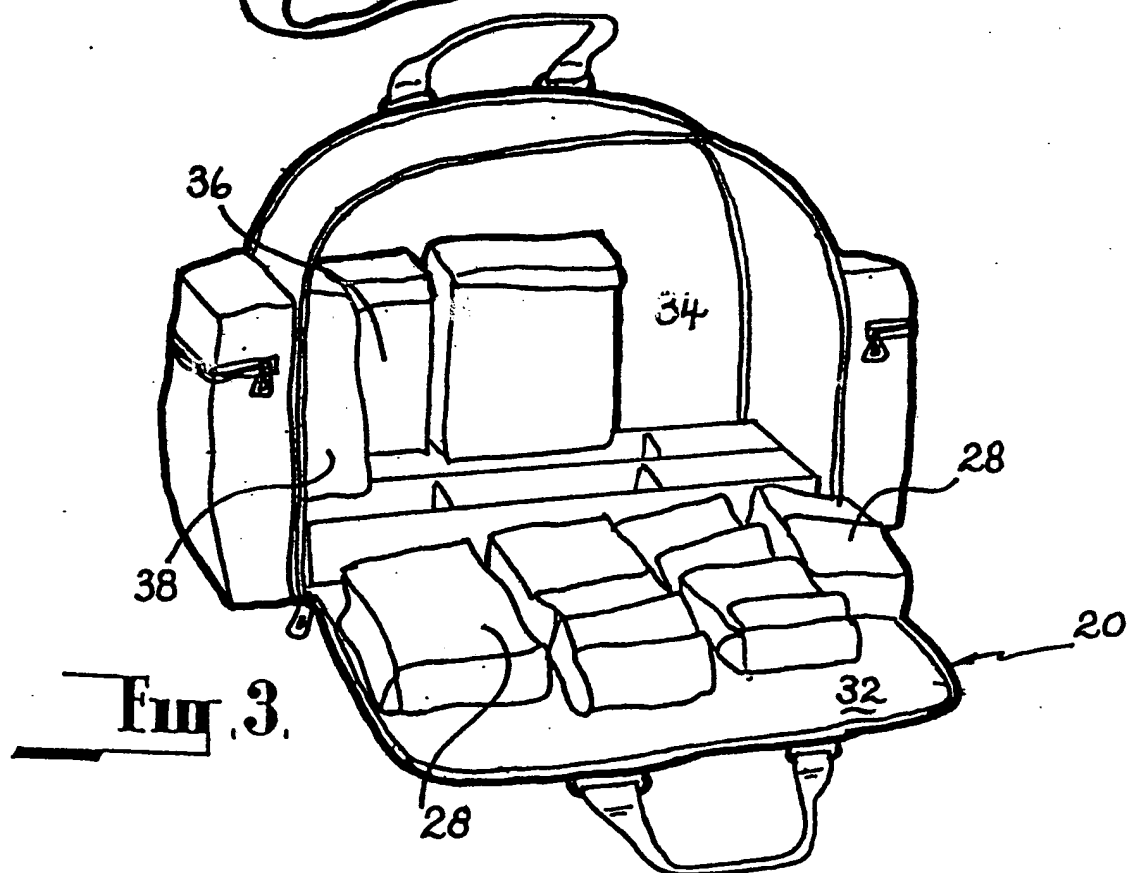
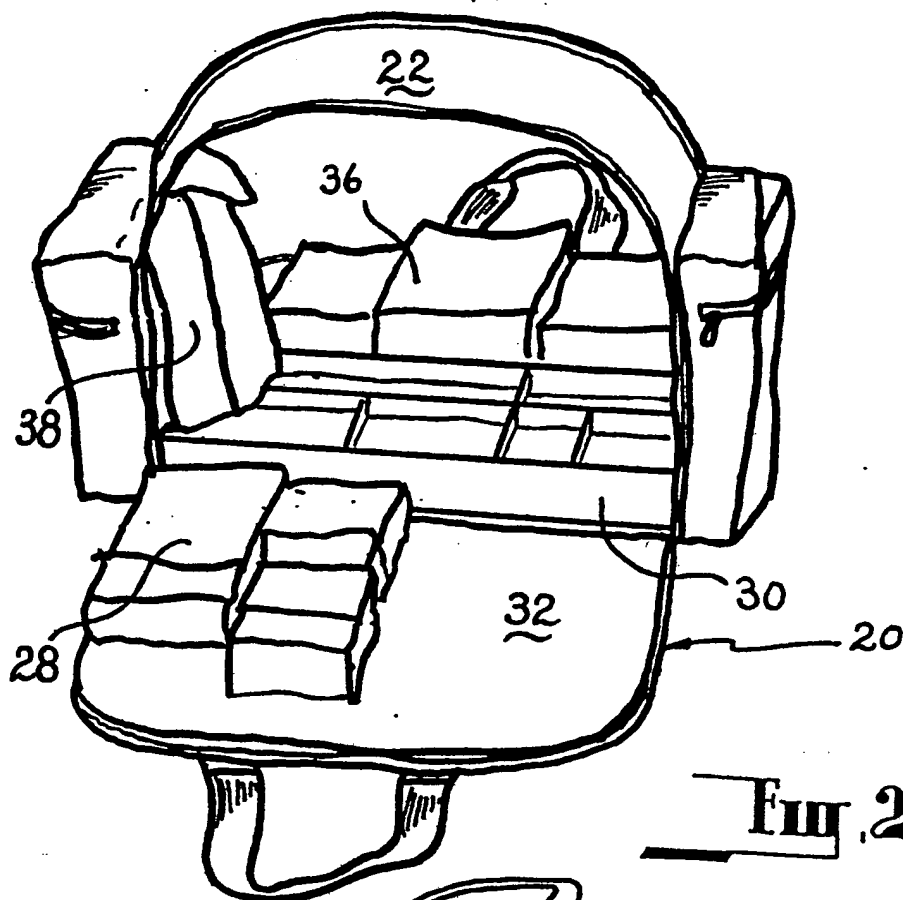
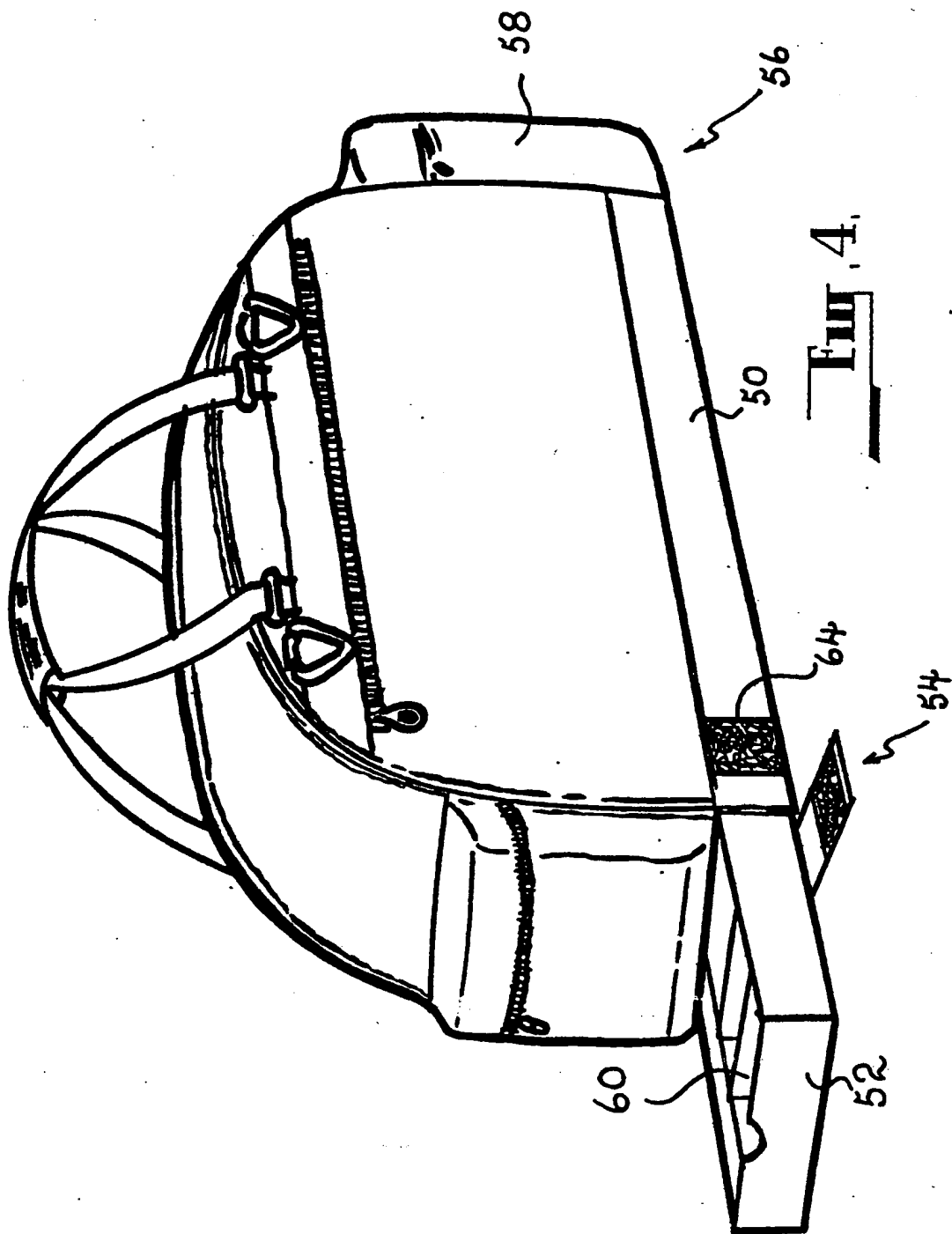


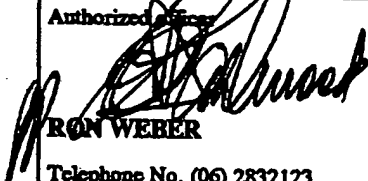
Fig. 1.

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Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No. 06 2853929		Authorized officer  RON WEBER Telephone No. (06) 2832123		

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